COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION
1401 EAST BROAD STREET
RICHMOND, VIRGINIA 23219 2000

Charles A. Kilpatrick, P.E.
Commissioner

November 24, 2014

Mr. Fred Cunningham
Director of Stormwater Permits
Office of VPDES Permits
Department of Environmental Quality
629 East Main Street
Richmond, Virginia 23218

RE: VSMP General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) – Year One 2013 MS4 General Permit July 1, 2013 to June 30, 2014

Dear Mr. Cunningham,

I am enclosing the final version of the Virginia Department of Transportation's Progress Report for its MS4 Program. This report includes the signature of the Commissioner of Highways on page 2. Please replace the "Draft" report submitted to you on September 30, 2014 with this report in its entirety.

Please feel free to contact me if you should have any questions or require additional information regarding this issue.

Sincerely,

Roy T. Mills
State Stormwater Program Administrator

Cc: Mr. Charles A. Kilpatrick, P.E.
Mr. Garrett Moore, P.E.
Mr. Richard L. Walton, Jr.
Mr. Mohammad Mirshahi, P.E.
Mr. Barton A. Thrasher, P.E.
MS4 Steering Committee

Virginia Department of Transportation

Virginia Pollutant Discharge Elimination System (VPDES) Permit

General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems

General Permit No. VAR04

Serving the Urbanized Areas of Virginia

Effective July 1, 2013 to June 30, 2018

Annual Progress Report

July 1, 2013 to June 30, 2014

FINAL
October 31, 2014

Virginia Department of Transportation
Location and Design Division
1401 East Broad Street
Richmond, Virginia 23219

Certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

Print Name: Mr. Charles A. Kilpatrick, P.E. Title: Commissioner of Highways

Signature: _____ Date: 11/21/14

VIRGINIA DEPARTMENT OF TRANSPORTATION MS4 PROGRAM

The Virginia Department of Transportation's (VDOT's) Municipal Storm Sewer System (MS4) Program is presented in the form of the six minimum control measures required by the Virginia MS4 General Permit. This program has been developed with a consistent statewide implementation strategy since VDOT maintains regulated MS4s (or components of regulated MS4s) within the public right-of-ways within all fifteen designated urbanized areas of Virginia. While VDOT's MS4 Program is targeted toward those that construct, maintain and utilize its transportation infrastructure and facilities, many of the program's proposed goals have the potential for a broader appeal.

The VDOT MS4 program has and continues to improve environmental compliance, quality and stewardship on VDOT land-disturbing activities through effective management, implementation, and enforcement of sound technical guidelines, criteria, and practices for storm water management and erosion and sediment control.

This Annual Report identifies the progress towards achieving the measurable goals, as well as any changes and/or additions identified for each Best Management Practice (BMP). A description of VDOT's proposed BMPs for each minimum control measure and the goals and accomplishments for this reporting period are summarized on the following pages:

General Notes:

1. There have been no modifications to departmental roles or responsibilities.
2. An assessment has been done on the appropriateness of BMPs, each BMP has been considered appropriate and no modifications are necessary.

Best Management Practices for Public Education and Outreach

1	*Distribute educational materials and perform outreach to inform citizens about the impacts polluted stormwater runoff discharges can have on water quality.*
A	**Public Education**
	Provide information on storm water quality, regulatory requirements; information on public participation, and links for additional information.
B	**Public Outreach**
	Employ diverse strategies to target audience's specific to the area serviced by the regulated MS4.

BMP 1A	**Public Education - Public Affairs Lead Division**
Measurable Goal(s)	*Goal*: Develop and maintain a Stormwater Management webpage on www.VirginiaDOT.org *Measure*: The development of the page, and visitor statistics based on industry-accepted Web metrics tools. *Goal*: Post and promote the availability of the Stormwater Management educational video and public service announcements (PSAs) on the VDOT Stormwater Management webpage and the Commonwealth of Virginia's YouTube Web page. *Measure*: The posting of the video and PSAs on both Webpage and number of requests received for copies. *Goal*: Develop a VDOT Stormwater Management fact sheet. An electronic version of the fact sheet will be posted on the VDOT webpage. Additionally, copies may be printed and distributed to the public and other MS4 operators. *Measure*: The development of the fact sheet and its posting on the VDOT webpage, and the number of copies distributed. *Goal*: Partner with other MS4 operators to broadcast SWM Public Service Announcements (PSAs) twice in each urbanized area per permit cycle. *Measure*: Number of times PSAs are broadcast.
Milestone	Maintain the Stormwater Management Web page on www.VirginiaDOT.org. Continue posting information regarding VDOT's Stormwater Management Program as available. Partner with other MS4 operators to broadcast the Stormwater Management public service announcements (PSA).
Accomplishments	Maintain the Stormwater Management Web page on www.VirginiaDOT.org. VDOT continues to maintain the Stormwater Management web page at http://www.virginiadot.org/programs/stormwater_management.asp Continue posting information regarding VDOT's Stormwater Management Program as available. VDOT continues to post information, as available. There have been 1,136 visits to the Stormwater Management web page from July 1, 2013 to June 30, 2014, and there have been 1,725 views to the page during the same time period. A view is a look at the page, and a visit occurs when an individual goes to the page as many times as he or she would like in a half-hour period without logging off. Partner with other MS4 operators to broadcast the Stormwater Management PSAs. VDOT continues to broadcast Stormwater Management-related PSAs on YouTube. The Maintaining Stormwater Pollution Reduction Facilities PSAs received 112 views. The Protecting Virginia's Waterways PSA received 53 views.

BMP 1B(1)(a)	Public Outreach – Maintenance Lead Division
Measurable Goal(s)	*Goal*: Install message signs and mechanism for distribution of informational brochures at pet waste stations at safety rest stations and welcome centers regarding environmental effects of pet waste and encouraging pet owners to properly dispose of their pet waste. *Measure*: Number of signs installed and number of brochures distributed.
Milestone	Install message signs and distribute brochures at pet waste stations on environmental effects and proper disposal of pet waste.
Accomplishments	The pet waste stations maintenance and restocking is part of VDOT's Monthly Quality Assessment Review/Safety Rest Area Inspection. This inspection reviews the Pet Stations for functionality and to assure they are being maintained and stocked. The pet waste stations are stocked with disposal bags as part of the normal maintenance operation. As part of the daily good housekeeping procedures for trash and debris removal, any pet waste discovered is picked up and placed in the appropriate trash receptacle.

BMP 1B(1)(b)	Public Outreach –Transportation Planning Lead Division
Measurable Goal(s)	*Goal*: Promote storm drain stenciling and Adopt-a-Highway programs. *Measure*: Number of land use permits issued for storm drain stenciling and highway miles adopted under the Adopt-a-Highway program.
Milestone	Promote storm drain stenciling and Adopt-a-Highway programs and track number of permits issued and highway miles adopted.
Accomplishments	No Chesapeake Bay watershed storm drain stenciling permits were issued during this permit year.

BMP 1B(2)	Public Outreach – Traffic Engineering Lead Division
Measurable Goal(s)	*Goal*: Participate in watershed sign installation program based on available funding. *Measure*: Total number of signs installed.
Milestone	Install additional watershed signs based on available funding.
Accomplishments	VDOT replaced two (2) existing watershed signs for Buffalo Creek and New River at a cost of $10,057 as part of Phase 1 of the 2014 Watershed project. Additional maintenance will be completed in Phase 2 of this project in FY15.

Best Management Practices for Public Participation and Involvement

2	*Provide opportunities for citizens to participate in program development and implementation, including effectively publicizing public hearings and/or encouraging citizen representatives on a stormwater management panel.*
A	**Public Involvement**
	Provide public access to information pertaining to VDOT's MS4 Program.
B	**Public Participation**
	Participate in watershed organizations and local government technical advisory committees to ensure that provisions for linear development projects are incorporated into local watershed planning.

BMP 2A	**Public Involvement - Public Affairs Lead Division**
Measurable Goal(s)	*Goal*: Make available for public review VDOT's MS4 Program Plan and subsequent annual reports on the VDOT Stormwater Management Web page. Promote the location of the Stormwater Management Web page in VDOT publications, where applicable. *Measure*: Visitor statistics based on industry-accepted Web metrics tools.
Milestone	MS4 Program Plan on the VDOT Stormwater Management Web page. Continue to promote the location of the Stormwater Management Web page in VDOT publications, where applicable.
Accomplishments	MS4 Program Plan and associated annual reports are posted on the VDOT Stormwater Management Web page. VDOT continues to maintain the Stormwater Management web page at http://www.virginiadot.org/programs/stormwater_management.asp. VDOT continues to post information, as available. There have been 1,136 visits to the Stormwater Management web page from July 1, 2013 to June 30, 2014, and there have been 1,725 views to the page during the same time period. A view is a look at the page, and a visit occurs when an individual goes to the page as many times as he or she would like in a half-hour period without logging off. VDOT maintains the means for the public to submit comments on its MS4 Program at any time. The following information is located on the Stormwater Management web page: **Contact Us** If you have questions, comments or concerns about the stormwater management program, contact us at MS4@vdot.virginia.gov. For drainage problems, contact the VDOT Customer Service Center at 1-800-FOR-ROAD. Virginia Department of Transportation Location and Design 1401 E. Broad St. Richmond, VA 23219 MS4@vdot.virginia.gov There were no comments submitted related to the MS4 Program in this reporting year.

BMP 2B(1)	**Public Participation – Location and Design Lead Division for project design related issues**
Measurable Goal(s)	*Goal:* Participate in local activities aimed at increasing public awareness of water quality and stormwater issues. *Measure*: Number of watershed planning meetings attended.
Milestone	Participate in watershed planning meetings and maintain a summary of issues considered.
Accomplishments	VDOT L&D employees / consultants participated in the following meeting / activities: ➢ EPA workshop ➢ AASHTO SWM Conference ➢ Hampton Roads monthly environmental review meeting at the Hampton Roads Planning District Commission (HRPDC). ➢ City of Chesapeake Stormwater Advisory Committee ➢ Rivanna Regional Educational Partnership meetings ➢ Fredericksburg area MS-4 stakeholders meetings ➢ Rivanna Rambler for Outreach meetings ➢ CO staff attended numerous MS4 stakeholder meeting ➢ IDDE information meeting ➢ Numerous BMP educational meetings

BMP 2B(2)	**Public Participation – Environmental Lead Division for water quality related regulatory issues**
Measurable Goal(s)	Goal: Participate in local activities aimed at increasing public awareness of water quality and stormwater issues. Measure: Number of watershed planning meetings attended.
Milestone	Participate in watershed planning meetings and maintain a summary of issues considered.
Accomplishments	Participated in 65 meetings – Coastal Zone Management Policy Team Meeting, DEQ MS4 Chesapeake Bay TMDL Guidance Stakeholder Advisory Group Meeting, DEQ WetCAT meetings (3), DEQ Meeting on Water Quality Standards Clarifications Proposed Rule, DEQ Public Meeting on Chesapeake Bay Milestones Development and Non-point Source Program Plan, DEQ Chesapeake Bay Agreement Public Listening Session, VMRC/DEQ Sand Replenishment Projects Working Group, ASCE Richmond Chapter Meeting, AASHTO Natural Resources Subcommittee Teleconference, , EPA/FHWA Webinar Green Infrastructure in Road Projects, 2014Environment Virginia Symposium, Virginia PCB TMDL Update Webinar (Environmental Standards Inc.), Chesapeake Bay TMDL Readiness Workshop (Timmons Group), Adopt-A-Highway Fall 2013Pickup at 14th St/Broad St/I-95, Adopt-A-Highway Spring 2014 Pickup at 14th St/Broad St/I-95, Middle James Roundtable Annual Meeting, Meeting with Upham Brook Watershed Streamkeeper, Rappahannock TMDL Meeting with Fredericksburg Residency and District, Northern Virginia TMDLs Meeting with Leesburg Residency, Northern Virginia TMDLs Meeting with Fairfax Residency, Northern Virginia TMDLs Meeting with Prince William Residency, Stroubles Creek and Crab Creek BMP and IP Meetings with Virginia Tech, Stroubles Creek and Crab Creek BMP and IP Meetings with Town of Blacksburg, Stroubles Creek and Crab Creek BMP and IP Meetings with Town of Christiansburg, City of Alexandria Stormwater Program Meeting, City of Falls Church Stormwater Program Meeting, Town of Vienna Stormwater Program Meeting, Arlington Co. Stormwater Program Meeting, City of Fairfax Stormwater Program Meeting, City of Manassas Stormwater Program Meeting, Prince William Co. Stormwater Program Meeting, Town of Leesburg Stormwater Program Meeting, Town of Herndon Stormwater Program Meeting,

	Fauquier Co. Stormwater Program Meeting, Chesterfield Co. Stormwater Program Meeting, City of Virginia Beach Stormwater Program Meeting, City of Norfolk Stormwater Program Meeting, Henrico Co. Stormwater Program Meeting, Loudoun Co. Stormwater Program Meeting, City of Charlottesville Stormwater Program Meeting, City of Newport News Stormwater Program Meeting, City of Portsmouth Stormwater Program Meeting, City of Williamsburg Stormwater Program Meeting, College of William and Mary Stormwater Program Meeting, City of Chesapeake Stormwater Program Meeting, City of Hampton Stormwater Program Meeting, Upper Broad Run Watershed Management Plan Meetings (3), Upper Tennessee River Roundtable Meetings (2), James River PCB TMDL, Moores Creek Sediment TMDL , Pamunkey River TMDL, Back Bay and Lower Chesapeake TMDL (2), Poquoson River and Back River TMDL, Upper Roanoke River Bacteria/Sediment TMDLs IP (3), Crooked Run Bacteria TMDL (5), Bacteria TMDL for Clinch River and certain tributaries, IP Development for Crab Creek Sediment and Bacteria TMDLs (3), Bacteria TMDL Redevelopment in the James River and Tributaries in Lynchburg (3) And Elizabeth and Tidal James River PCB TMDLs (2).

Best Management Practices for Illicit Discharge Detection and Elimination (IDDE)

3	*Develop, implement, and enforce a program to detect and eliminate illicit discharges into VDOT's stormwater system.*
A	**Prevent or minimize to the maximum extent practicable, the discharge of hazardous substances or oil**
	Guidance addresses the issues of illicit discharge. Non-storm water discharges will be prohibited, except for those of uncontaminated water as listed in the permit requirements. Education on illicit discharges will be a key component.
B	**Evaluate guidance to identify and report Illicit Discharges Connections**
	Guidance and procedures to detect and report the source of the illicit discharges into MS4.
C	**Continue to develop Inventory of Storm Water Systems**
	An updated GIS-compatible digital database of storm water infrastructure outfalls.
D	**Track the number of illicit discharges identified and eliminated**
	Guidance for tracking and reporting illicit discharges.
E	**Prohibit, through ordnance, or other regulatory mechanism non-stormwater discharges**
	Practices to eliminate and/or minimize illicit discharges.
F	**Address Total Maximum Daily Load (TMDL) Waste Load Allocation (WLA) streams within each MS4**
	Update plan within 18 months to include measurable goals, schedules, and strategies to ensure MS4 consistency with any TMDL for which waste loads have been allocated to the MS4.

BMP 3A	**Evaluate guidance and training programs to prohibit non-stormwater discharge into MS4 – Maintenance Lead Division**
Measurable Goal(s)	*Goal:* Review training guidance and current practices and update and revise as necessary. *Measure:* An annual evaluation of guidance and practices. *Goal:* Provide IDDE training programs to appropriate audiences. *Measure:* Number of employees, contractors, and volunteers trained.
Milestone	Review and update/revise training guidance and current practices related to IDDE as necessary. Review and update/revise other training materials to incorporate guidance dealing with IDDE as necessary. Provide IDDE training to appropriate audiences.
Accomplishments	The Environmental MS4 Facility Compliance training includes an IDDE module, which introduces the IDDE Field Guide, and includes information on what is / what is not an illicit discharge, what to look for when responding to a "Polluted Stormwater" work order, common issues encountered in IDDE investigations, determining when further investigation is needed, and who to contact regarding an illicit discharge. The MS4 Facility Compliance course was attended by 240 employees during this permit year.

BMP 3B	**Guidance to identify and report Illicit Discharges Connections – Maintenance Lead Division**
Measurable Goal(s)	*Goal:* Develop/revise illicit discharge identification and reporting protocols. *Measure:* Establishment of identification and reporting protocols. *Goal:* Establish a means for the public to report illicit discharges. *Measure:* Development of reporting system and number of reports received of potential illicit discharges.
Milestone	Modify illicit discharge identification and reporting protocols as necessary based on software purchased and /or the results of user acceptance testing of software.

	Continue illicit discharge reporting system utilizing the VDOT SWM Program webpage, Adopt-A-Highway Program or through direct contact with the appropriate VDOT Residency/District Office.
Accomplishments	The outfall characterization form was modified to add extra definition to the overall outfall characterization, as outlined in Chapter 11 of the *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments.* The updated form also allows gathering of additional information related to erosion at the outfall channel and outfall structure. IDDE questions have been added to the Stormwater BMP inspection form. Upon further investigation, all potential IDDE's that were reported this permit year were classified as organic sheen and not oil sheen. In April 2014, an Adopt A Highway IDDE Field Guide was developed and implemented. This field guide is available for review by the team leaders of each adopted highway segment. .

BMP 3C	**Inventory of Storm Water System – Maintenance Lead Division**
Measurable Goal(s)	*Goal:* Develop and maintain an updated inventory of roadway outfalls in the MS4 urbanized areas. *Measure:* Development and implementation of inventory system and protocols. *Measure:* Percentage of centerline miles by roadway functional class by MS4 area inventoried.
Milestone	Perform pilot project for the collection of outfalls and critique the software and instructional manual and modify both as needed. Make an in-house or outsource decision for outfall inventory for each of the MS4 urban areas based on the pilot. Continued the inventory of the outfalls based on roadway functional classification and/or watershed as required for satisfying other MS4 BMPs.
Accomplishments	Discussions with other MS4 permit holders lead VDOT to the U.S. Army Corps of Engineers (USACE) which had completed an outfall inventory for Stafford County. The USACE can provide this assistance to VDOT in accordance with Section 22 of the Water Resources Development Act (WRDA) of 1974 (Public Law 93-251), as amended, which authorizes the Secretary of the Army, acting through the Chief of Engineers, to assist the States in the preparation of comprehensive plans for the development, utilization and conservation of water and related resources of drainage basins, watersheds and ecosystems located within the boundaries of such State. Letters of Agreement have been negotiated with the Baltimore District, Norfolk District and Wilmington NC District of the USECE to complete the following tasks: 1. Collection of existing information and field survey preparation 2. Field survey and assessment of outfalls 3. Development of outfall database and GIS layers 4. Documentation of procedures 5. Final Report The Baltimore District will complete the outfall inventory/assessment for the Washington, Winchester and Harrisonburg census urban areas. The Norfolk District will complete the outfall inventory/assessment for the Charlottesville, Fredericksburg, Richmond and Virginia Beach census urban areas. The Wilmington NC District will complete the outfall inventory/assessment for the Bristol, Kingsport, Blacksburg, Roanoke, Lynchburg and Danville census urban area. The USACE field survey will be completed at the targets locations identified by the VDOT MS4 Target Model.

Besides the USACE, VDOT also uses other selected contractors to complete portions of the outfall survey.

The function of the MS4 Target Model is to predict the most likely location of a VDOT stormwater conveyance discharging into Waters of the US. The MS4 Target Model utilizes the most up-to-date hydrographic data and VDOT road centerline data, to identify locations were roadways maintained by VDOT are within a specified proximity to streams, water bodies or wetlands. The MS4 Target Model must be ran periodically because of the addition of roads into the VDOT system, road changes due to construction and updates to the stream, wetlands or water body GIS layers.

Summary of targets produced by each MS4 Target Model run:

Date	Targets generated
07/22/2009	9,723
11/15/2009	1,412
07/24/2010	1,331
12/11/2011	200
11/11/2013	15,089
Total	27,755

Management of the Outfall survey can be broken down into three parts:

1. Assignment of the targets to the USACE Districts is accordance with the funds available for matching funds by the USACE. The targets are assigned by HUC 6 watershed based on a priority list established based on present and future TMDL's
2. The USACE completes the field work and logs "outfall" or "no outfall" points at each target location.
3. VDOT groups targets that are close together into clusters and checks to see if data has been logged near each cluster. A desktop study is completed on the clusters that are not cleared to determine if they will be reassigned for outfall determination. Some clusters that do not have a data point logged are eliminated because the reason for the target generation no longer exists, such as wetlands clearly no longer exists because of residential construction.

Census Urban Area	Outfalls	Total Clusters	Cluster Cleared (Worked)	Percent Complete
Blacksburg, VA	45	134	56	42%
Bristol, TN—VA	139	214	67	31%
Charlottesville, VA	408	182	157	86%
Danville, VA	85	59	55	93%
Fredericksburg, VA	866	475	382	80%
Harrisonburg, VA	129	133	92	69%
Kingsport, TN—VA	99	128	37	29%
Lynchburg, VA	332	214	158	74%
Richmond, VA	3,087	2,084	1,149	55%
Roanoke, VA	858	704	476	68%
Staunton--Waynesboro, VA	0	156	9	6%
Virginia Beach, VA	740	787	256	33%
Washington, DC--VA—MD	4,208	3,531	2,085	59%
Williamsburg, VA	0	250	11	4%

	Winchester, VA	409	207	169	82%
	VDOT Total	**11,408**	**9,258**	**5,159**	**56%**

VDOT has started collection of MS4 Outfalls and Point of Discharges using tablets and a cloud based GIS Online software. The results of the Target Model are loaded onto the Cloud and when the targeted area is investigated all Outfalls or Points of Discharge that are found are captured and posted to the Cloud. Presently, data is stored in two separate formats. However, all previously reported (before the cloud) outfalls are being converted into the Cloud data format. The reporting of Outfalls on the cloud is real time and allows for prompt review for IDDE investigation.

A pilot QA/QC program has also been implemented using the Cloud GIS Online software. A total of six percent of the cleared clusters are selected at random from each Census Urban Area and a field team verifies all reported Outfalls and Points of Discharge and completes an IDDE report at each outfall point.

BMP 3D	**Track and eliminate illicit discharges – Maintenance Lead Division**
Measurable Goal(s)	*Goal*: Notify in writing any downstream regulated MS4 to which the VDOT small regulated MS4 is physically interconnected to their system. *Measure*: Total number of interconnected MS4 Operators notified. *Goal:* Develop and maintain a process for contacting and reporting illicit discharges to appropriate authority. *Measure:* Development of process and number of illicit discharges reported.
Milestone	Review/update list of MS4 localities and provide notification of physical interconnection as identified through implementation of outfall inventory. Report verified illicit discharges to the appropriate authorities.
Accomplishments	

CUA	Number of Locations Investigated	Number of Illicit Discharge found
Roanoke	0	0
Blacksburg	0	0
NOVA	1	0
Richmond	3	2
Charlottesville	0	0
Winchester	0	0
Fredericksburg	1	0
Harrisonburg	0	0
Total	5	2

VDOT investigated 5 potential illicit discharges reported to the IDDE Field Team. Follow up investigation determined that that was no illicit discharge present at 3 of the 5 reported sites.

Summary of IDDEs verified:

1) VDOT and Henrico County met onsite to investigate a report of a potential illicit discharge into Jordan's Creek, which flows under West Broad Street in Henrico County. The photos

	that were included with the initial report indicated turbidity in the creek. There were several construction sites upstream and downstream; however, no evidence of a discharge from these sites was found. 2) East of Jordan's Creek, on the north side of West Broad Street, what appeared to be grease was observed in an outfall in front of a Hardees's Restaurant, and an orange discharge was observed exiting from a pipe originating from Chipotle. These two discharges were reported to Henrico County for enforcement. Henrico County followed up with these two businesses; the discharges were stopped and no further problems have been encountered. The Environmental MS4 Facility Compliance training includes an IDDE module, which introduces the IDDE Field Guide, and includes information on what is / what is not an illicit discharge, what to look for when responding to a "Polluted Stormwater" work order, common issues encountered in IDDE investigations, determining when further investigation is needed, and who to contact regarding an illicit discharge. The MS4 Facility Compliance course was attended by 240 employees during this permit year.

BMP 3E	**Prohibition of non-stormwater discharges – Transportation Planning Lead Division**
Measurable Goal(s)	*Goal*: Prohibit non-stormwater discharges into storm sewer systems through the Land Use Permitting Program. *Measure*: Number of guidance and training documents reviewed/revised to incorporate IDDE identification procedures. *Measure*: Number of Land Use Permitting employees that participate in trained on IDDE identification.
Milestone	Provide training to all new employees involved in the Land Use Permits Program on IDDE identification and conduct refresher courses to others as needed. Track number of employees trained.
Accomplishments	Illicit discharge training: 17 statewide Land Use staff received refresher IDDE training this reporting year.

BMP 3F	**Update MS4 plan to ensure consistency with TMDLs – Environmental Lead Division**
BMP 3F(1)	**Evaluate/revise/update legal authorities/policies/procedures**
Measurable Goal(s)	*Goal:* Develop a list of existing legal authorities, policies and procedures that are applicable to reducing the pollutant identified in the WLA. *Measure:* Development of list. *Goal:* Develop and implement a schedule to evaluate existing legal authorities, policies and procedures to determine their effectiveness to address reduction of the pollutant identified in the WLA. *Measure:* Development and subsequent implementation of schedule *Goal:* Develop and implement a schedule to update existing legal authorities, policies and procedures to address weaknesses related to the MS4 Program and to ensure consistency with the TDML. *Measure:* Development and subsequent implementation of schedule.
Milestone	Continue process of making revisions or modifications to existing legal authorities, policies and procedures needed to address weaknesses related to the MS4 Program for ensuring consistency with the TDML.

Accomplishments	Continued addressing weaknesses of existing legal authorities, policies and procedures applicable to reducing sediment, bacteria and PCBs based on criticality, scheduling and complexity using low/medium/high scale. o Secondary Street Acceptance Regulation (SSAR) Guidance Manual still under review. o Draft revisions to the Land Use Permit Manual still underway. o Draft revisions to Locally Administered Projects Manual still underway. o Draft MS4 Information checklist completed and under review.

BMP 3F(2)	**Update MS4 Program to address TMDL impacts – Environmental Lead Division**
Measurable Goal(s)	*Goal:* Update the MS4 Program Plan to include information regarding TMDLs to ensure consistency; as a stakeholder participate in the development of any implementation plan to address the TDML and incorporate applicable best management practices identified in the TMDL plan into VDOT's MS4 Program Plan. *Measure:* Number of TMDLs incorporated into VDOT MS4 Program Plan. *Measure:* Number of plans implemented to address identified WLA. *Goal:* Identify and develop an estimate of the area draining from within VDOT right of way to identified TMDL waterways. *Measure:* Number of areas identified. *Goal:* Develop a characterization of the annual flow that estimates the storm water discharged and the quantity of pollutant identified in the waste load allocation discharged by the MS4. *Measure:* Number of sites for which development of characterization of stormwater discharges was completed. *Goal:* Implement procedures, reconnaissance and sampling protocols to identify and address the discharge of the pollutant identified in the waste load allocation to the MS4. *Measure:* Implementation of procedures. *Goal:* Integrate an awareness campaign into the public education and outreach program that promotes methods to eliminate and reduce the discharges of the pollutant identified in the WLA. • *Measure:* Number of employees trained regarding the sources and methods to eliminate and minimize the discharge of the pollutant. Continue implementation procedures, reconnaissance and sampling protocols to identify and address the discharge of the pollutant identified in the waste load allocation to the MS4. • Complete process to develop an awareness campaign that promotes methods to eliminate a reduce the discharges of the pollutant identified in the WLA and integrate into the publ education and outreach program.
Milestone	Continuation of previous Milestones: • Complete process of identifying VDOT facilities impacted by TMDL Implementation Plans. • Complete process of developing an estimate of the area draining from within VDOT right of way to identified TMDL waterways. • Continue process of developing a characterization of the annual flow that estimates the storm water discharged and the quantity of pollutant identified in the waste load allocation discharged by the MS4 including procedures, reconnaissance and sampling protocols to identify and address the discharge of the pollutant identified in the waste load allocation to the MS4. Continuation of previous Milestones: • Complete development process and implement procedures, reconnaissance and sampling protocols to identify and address the discharge of the pollutant identified in the waste load allocation to the MS4. Continuation of previous Milestones:

- Continue implementation procedures, reconnaissance and sampling protocols to identify and address the discharge of the pollutant identified in the waste load allocation to the MS4.
- Begin process to develop an awareness campaign for integration into the public education and outreach program that promotes methods to eliminate and reduce the discharges of the pollutant identified in the WLA.

Accomplishments

❖ Draft model for mapping TMDL watersheds in VDOT's GIS remains under revision in coordination with DEQ, USGS, and DEM to incorporate revised NHD data

Table 4A. Annual Characterization of VDOT Properties in TMDL Watersheds

	VDOT Contributing Area (ac)	VDOT % Area of CUA in TMDL Watershed	Stormwater Discharge (cu ft)	Sediment Load (tons/yr)	Bacteria Load (MPN/yr)	PCB Load (grams)
Stroubles Creek	59.74	1.25	4,765,559	4.94	N/A	N/A
Crab Creek	162.68	3.33	6,815,850	8.24	3.86×10^{13}	N/A
Goose Creek	422	5.11	45,945,303	62.59	N/A	N/A
Popes Head Creek	689	8.03	61,114,080	59	N/A	N/A
Bull Run	4,554	8.21	473,794,189	611	N/A	N/A
Abrams & Opequon Creeks	937	4.05	149,515,720	153	8.49×10^{14}	N/A
Potomac River	21,200	7.34	2,2562,601,701	N/A	N/A	356
Roanoke River	2,766	3.72	346,703,484	358	1.97×10^{15}	N/A

❖ ***Stroubles Creek Best Management Practices Study and Annual Characterization completed***

- As required by VDOT's coverage under the current General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems, VDOT is in the process of updating its MS4 Program Plan to incorporate an updated TMDL Action Plan for the Stroubles Creek TMDL that incorporates its previously identified efforts to address the TMDL assumptions and requirements. A TMDL annual characterization consistent with VDOT's previous Program Plan is described here until such time as the required updates are completed and implemented.
- An aggregated wasteload allocation (WLA) of 211 tons of sediment/year was assigned to three permitted small municipal separate storm sewer systems (MS4s), including VDOT's MS4 Permit # VAR040115.
- Table 4A summarizes the annual stormwater characterization for 2013.
- No VDOT facilities located within the watershed.
- There were no existing BMPs within the study area that could be incorporated into the model. There is one regulated outfall located within the VDOT ROW in the TMDL watershed.
- VDOT's only property within the TMDL watershed is roadway right of way. Therefore, sampling of a representative outfall is not applicable and is not required by the MS4 Permit.
- VDOT staff and consultants presented the findings from the BMP Selection and Implementation Plan for Sediment to staff from Virginia Tech on 9/17/13, Town of Blacksburg on 9/18/13 and Town of Christiansburg on 9/18/13.

❖ **Crab Creek Best Management Practices Study and Annual Characterization**

completed.

- As required by VDOT's coverage under the current General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems, VDOT is in the process of updating its MS4 Program Plan to incorporate an updated TMDL Action Plan for the Crab Creek TMDL that incorporates its previously identified efforts to address the TMDL assumptions and requirements. A TMDL annual characterization consistent with VDOT's previous Program Plan is described here until such time as the required updates are completed and implemented.
- An aggregated WLA of 28 tons of sediment/year and 3.40 x 10^8 cfu/year was assigned to two permitted small municipal separate storm sewer systems (MS4s), including VDOT's MS4 Permit # VAR040115.
- Table 4A summarizes the annual stormwater characterization for 2013.
- There are 7 regulated outfalls located within the VDOT ROW in the TMDL watershed.
- VDOT owns and operates one stormwater facility, an extended detention basin, within the Crab Creek TMDL watershed.
- VDOT operates one supporting facility, the Christiansburg Residency, in the Crab Creek TMDL watershed. The residency includes office spaces for VDOT staff and training, as well as a garage and salt operations, brine production, maintenance of VDOT vehicles and machinery, and storage for spreaders and signs.
- VDOT determined that sediment and other erodible materials have been historically handled at the Christiansburg Residency. The Christiansburg Residency property is not drained by a regulated outfall; therefore, sampling is not applicable and not required by the MS4 Permit.
- VDOT staff and consultants presented the findings from the BMP Selection and Implementation Plans for Sediment and Bacteria to staff from Virginia Tech on 9/17/13, Town of Blacksburg on 9/18/13 and Town of Christiansburg on 9/18/13.

❖ **Goose Creek Watershed Study**

- As required by VDOT's coverage under the current General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems, VDOT is in the process of updating its MS4 Program Plan to incorporate an updated TMDL Action Plan for the Goose Creek TMDL that incorporates its previously identified efforts to address the TMDL assumptions and requirements. A TMDL annual characterization consistent with VDOT's previous Program Plan is described here until such time as the required updates are completed and implemented.
- VDOT's WLAs for sediment to Goose Creek are assigned in two aggregate loads: One WLA is for all MS4s in Loudoun County (123.6 tons/year) and the other WLA is for all MS4s in the Town of Leesburg (287.4 tons/year).
- Table 4A summarizes the annual stormwater characterization for 2013.
- There are 112 regulated outfalls located within the VDOT ROW in the TMDL watershed.
- VDOT owns and operates 4stormwater facilities (extended detention basins) within the Goose Creek TMDL watershed. One of the four stormwater facilities was built after the development of the approved TMDL as a retrofit to a prior developed area.
- VDOT operates one supporting facility, the Leesburg Residency, in the Goose Creek TMDL watershed. The residency includes office spaces for VDOT staff and training, as well as a garage, salt operations, brine production, area for maintenance of VDOT vehicles and machinery, and storage for spreaders and signs.
- VDOT consultants presented the BMP Selection and Implementation Plans for Sediment to Leesburg Residency management and staff on 12/4/13. The Residency will continue to implement the Core BMPS of VDOT's MS4 Program

❖ **Popes Head Creek Watershed Study**

- As required by VDOT's coverage under the current General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems, VDOT is in the process of updating its MS4 Program Plan to incorporate an updated TMDL Action Plan for the Popes Head Creek TMDL that incorporates its previously identified efforts to address the TMDL assumptions and requirements. A TMDL annual characterization consistent with VDOT's previous Program Plan is described here until such time as the required updates are completed and implemented.
- VDOT's WLA for sediment to Popes Head Creek is assigned in two aggregate loads: One WLA is for all MS4s in Fairfax County (2,175.0 tons/year) and the other WLA is for all MS4s in the City of Fairfax (31.3 tons/year).
- Table 4A summarizes the annual stormwater characterization for 2013. Please note that the 2012 Annual Characterization incorrectly reported the sediment load. The correct sediment load for 2012 was 422.83 tons.
- There are 172 regulated outfalls located within the VDOT ROW in the TMDL watershed.
- VDOT owns and operates 15 stormwater facilities (extended detention basins) within the Popes Head Creek TMDL watershed. None of the fifteen stormwater facilities were built after the development of the approved TMDL.
- VDOT operates one supporting facility, the Fairfax Area Headquarters/Northern Virginia District Office, in the Popes Head Creek TMDL watershed. The facility consists of an office building, a vehicle maintenance shop, several equipment storage buildings, and a vehicle fueling station. Materials and salt are not stored at the facility in bulk.
- VDOT staff and consultants presented the BMP Selection and Implementation Plan for Sediment to 20 Fairfax Residency and 2 Prince William Residency management and staff on 4/4/14. The Residency will continue to implement the Core BMPS of VDOT's MS4 Program.

❖ **Bull Run Watershed Study**

- As required by VDOT's coverage under the current General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems, VDOT is in the process of updating its MS4 Program Plan to incorporate an updated TMDL Action Plan for the Bull Run TMDL that incorporates its previously identified efforts to address the TMDL assumptions and requirements. A TMDL annual characterization consistent with VDOT's previous Program Plan is described here until such time as the required updates are completed and implemented.
- VDOT's WLA for sediment to Bull Run is incorporated into six aggregate loads: Fairfax County (19,470.5 tons/year), Fairfax City (67.6 tons/year), Loudoun County (2,006.8 tons/year), Manassas City (998.0 tons/year), Manassas Park (514.9 tons/year) and Prince William County (2,418.7 tons/year).
- Table 4A summarizes the annual stormwater characterization for 2013. Please note that the 2012 Annual Characterization incorrectly reported the sediment load. The correct sediment load for 2012 was 41.2 tons.
- There are 954 regulated outfalls located within the VDOT ROW in the TMDL watershed.
- VDOT owns and operates 60 stormwater facilities (extended detention basins) within the Bull Run TMDL watershed. Ten of the sixty stormwater facilities were built after the development of the approved TMDL; and therefore, provide pollutant reductions on previously untreated area.
- VDOT operates eight facilities in the study area: Chantilly AHQ, Fairfax AHQ, West Parcel/Burke AHQ, Centreville Park and Ride, Stringfellow Park and Ride, Portsmouth Road Park and Ride, the Manassas Rest Area/Welcome Center Complex, and the

Manassas Rest Area Complex East. The Chantilly AHQ consists of a large office and equipment storage building, a vehicle fueling station, two large salt storage buildings, spreader racks, a salt water holding pond (salt pond), asphalt and gravel parking lots, and material stockpiles. Materials and chemicals stored in bulk on-site include sand, gravel, abrasives, liquid and granular salts, vacuum truck debris, and a variety of petroleum products. The Fairfax AHQ consists of the headquarters office building, a vehicle maintenance shop, several equipment storage buildings, and a vehicle fueling station. Materials and salt are not stored at the facility in bulk; however, several petroleum products are stored in bulk at the vehicle maintenance shop. The West Parcel/Burke AHQ consists of a large office and equipment storage building, two large salt storage domes, several spreader racks, two salt water holding ponds (salt ponds), asphalt and gravel parking lots, and material stockpiles. Materials and chemicals stored in bulk on-site include fill dirt, sand, gravel, abrasives, liquid and granular salts, and a variety of petroleum products. A portion of the facility is leased to a private contractor under VDOT's Turnkey Asset Management Program (TAMS). The Centreville Park and Ride consists of a large vehicle parking area and an extended detention basin. No materials or chemicals are stored at the site. Stringfellow Park and Ride consists of a large vehicle parking area and a curb and gutter system with drop inlets for stormwater management. No materials or chemicals are stored at the site. Portsmouth Road Park and Ride consist of large vehicle parking area and a curb and gutter system with drop inlets for stormwater management. No materials or chemicals are stored at the site. The Manassas Rest Area/Welcome Center Complex consists of a single story public restroom facility, a small outbuilding, asphalt parking areas and a curb and gutter system with drop inlets. No aggregate materials are stored at the site. Small amounts of janitorial and landscaping maintenance chemicals are stored in the buildings at the Site. The Manassas Rest Area Complex East consists of a single story public restroom facility, a small outbuilding, asphalt parking areas and a curb and gutter system with drop inlets. No aggregate materials are stored at the site. Small amounts of janitorial and landscaping maintenance chemicals are stored in the buildings at the Site.

- VDOT staff and consultants presented the BMP Selection and Implementation Plan for Sediment to 20 Fairfax Residency and 4 Prince William Residency management and staff on 4/4/14. In addition to implementing and annually evaluating the Core BMPS of VDOT's MS4 Program, the Residency will document vacuum-assisted street-sweeping to establish a baseline for FY15. The BMP Implementation Plan recommends monthly street-sweeping of 2,850 acres of roadway or monthly street-sweeping of 2,275 acres and installing a minimum impervious area of 480 acres of grassed filter strips to achieve VDOT's WLA. The Residency will begin documenting the acreage of street-sweeping beginning 7/1/14.

❖ **Opequon Creek and Abrams Creek Watershed Study**

- As required by VDOT's coverage under the current General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems, VDOT is in the process of updating its MS4 Program Plan to incorporate an updated TMDL Action Plan for the Opequon and Abrams Creeks TMDLs that incorporates its previously identified efforts to address the TMDL assumptions and requirements. A TMDL annual characterization consistent with VDOT's previous Program Plan is described here until such time as the required updates are completed and implemented.
- An aggregated wasteload allocation (WLA) of 442.7 tons/yr and 1.94 x 10^{13} cfu for Abrams Creek and 269.2 tons/yr for Opequon Creek was assigned to two permitted small municipal separate storm sewer systems (MS4s), including VDOT's MS4 Permit # VAR040115.

- Table 4A summarizes the annual stormwater characterization for 2013. Please note that the 2012 Annual Characterization incorrectly reported VDOT's Contributing Acreage. The correct Contributing Acreage is 1,715.
- There are 346 regulated outfalls located within the VDOT ROW in the TMDL watershed.
- VDOT owns and operates 18 stormwater facilities (extended detention basins) within the Opequon Creek and Abrams Creek TMDL watersheds. 5 of the 18 stormwater facilities were built after the development of the approved TMDL; and therefore, provide pollutant reductions on previously untreated area.
- VDOT operates three facilities in the study area: the Winchester Area Headquarters (AHQ), the Clear Brook Rest Area, and the aggregate storage area at Rt. 11. The Winchester AHQ consists of a large office and equipment storage buildings, two large salt storage buildings, spreader racks, asphalt and gravel parking lots, and material stockpiles. Materials and chemicals stored in bulk on-site include sand, gravel, abrasives, liquid and granular salts, vacuum truck debris, and a variety of petroleum products. The Clear Brook Rest Area consists of a large, single story public restroom facility, two asphalt parking lots, a curb and gutter system with drop inlets, and a small stormwater management pond. The facility utilizes a diesel fuel powered emergency generator. Janitorial and landscaping maintenance chemicals are stored at the Site. No aggregate materials are stored at the Site. The majority of the Rt. 11 Storage Area consists of an undeveloped lot with aggregate material storage.
- VDOT staff and consultants presented the BMP Selection and Implementation Plans for Sediment and Bacteria to Leesburg Residency management and staff on 12/4/13. The Residency will continue to implement the Core BMPS of VDOT's MS4 Program.

❖ **Potomac River**

- As required by VDOT's coverage under the current General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems, VDOT is in the process of updating its MS4 Program Plan to incorporate an updated TMDL Action Plan for the Potomac River TMDL that incorporates its previously identified efforts to address the TMDL assumptions and requirements. A TMDL annual characterization consistent with VDOT's previous Program Plan is described here until such time as the required updates are completed and implemented.
- An aggregated wasteload allocation (WLA) was assigned to eight permitted municipal separate storm sewer systems (MS4s), including VDOT's MS4 Permit # VAR040115, as indicated in Table 4B.

Table 4B: Potomac River PCB TMDL WLAs for MS4s

Jurisdiction	Watershed Code	Acres	VDOT Contributing Acres	Baseline PCB Load from Regulated MS4s (grams/year)	PCB WLA (grams/year)	VDOT Contributing PCB load	% Reduction
Arlington County	4910	4,591	169	67	0.36	1.3853	99.50%
	4940	6,370	282	1,540	7.33	5.6642	99.50%
	4960	3,180	513	132	6.27	38.7	95.30%
City of Falls Church	4960	2,727	1.00	6.16	0.293	0.5109	95.20%
City of	4960	8,771	60.5	62.7	2.98	4.2601	95.20%

Alexandria	4980	1,283	42.6	4.92	0.503	1.6327	89.80%
	5090	413	98.3	47.6	6.79	0.00941	85.70%
Fairfax County	4910	38,905	705	78.6	0.973	3.2553	98.80%
	4960	186	185	19.9	0.943	0.003124	95.30%
	4980	5,622	1,303	85.9	37.4	0.28629	56.50%
	5090	2,750	330	39.7	5.65	0.12848	85.80%
	5131	1,571	1,653	8.54	8.11	0.05009	5.00%
	5251	8,177	301	9.81	1.64	0.5887	83.30%
Fairfax City	5131	391	0.383	0.0888	0.0843	0.3446	5.00%
Prince William County	5251	20,064	1,894	39.4	5.61	11.307	85.80%
	5491	3,193	1,038	3.26	3.09	0.8603	5.00%
Stafford County	5491	18,211	158	6.29	5.98	18.863	5.00%

- Table 4A summarizes the annual stormwater characterization for 2013.
- There are 5206 regulated outfalls located within the VDOT ROW in the TMDL watershed.
- VDOT owns and operates 252 stormwater facilities (extended detention basins) within the Bull Run TMDL watershed. None of the facilities were specifically design to remove PCBs as a pollutant of concern. However, all of the facilities are assumed to remove PCBs if bound to sediment particles that are captured.
- VDOT operates forty facilities in the study area, including 19 Park & Rides (Backlick North, Courthouse Road, Dale City, Gambrill Road, Garrisonville Road, Hillendale, Horner Road, Lake Ridge, Lindendale, Lorton, Mine Road, Minnieville Rd & Old Bridge Rd, Montclair Commuter Lot, Portsmouth Road, Princeton Woods, Quantico, Route 123, Stringfellow Road and Sydenstricker VDOT Lot), 6 Rest Areas (Dale City Car Only Rest Area North I-95, Dale City Car Only Rest Area South I-95, Dale City Truck Only Rest Area North I-95, Dale City Truck Only Rest Area South I-95, Manassas Rest Area East I-66, Manassas Rest Area West I-66), 10 Area Headquarters (Chantilly, Dale City-TAMS, Dumfries, Fairfax, Lake Ridge, Manassas Residency/AHQ Complex, Merrifield, Newington, West Parcel, Westmoreland/Arlington-TAMS), 2 Maintenance Complexes (Columbia Pike Maintenance/Operations Complex, Van Dorn Maintenance Complex) , 1 Residency Complex (Fairfax), and 1 Lessee (13302 Jefferson Davis Highway). The Park & Rides consist of vehicle parking areas, travel lanes, and commuter transfer areas. The Rest Areas consist of parking areas, green space, and restrooms. The Area Headquarters and Residency consist of office buildings, maintenance shops, several equipment storage buildings, and vehicle fueling stations. The Maintenance Complexes consist of office buildings, maintenance shops and several equipment storage buildings. The Lessee site consists of residential homes, lawns, and other residential structures. No sources of PCBs were found at any of these facilities.
- VDOT staff completed the BMP Selection and Implementation Plan for PCBs. In addition to implementing and annually evaluating the Core BMPS of VDOT's MS4 Program, the BMP Implementation Plan recommends continued implementation of current localized efforts to remove sediments (such as street sweeping, catch basin cleanout, ditch pulling and shoulder clipping) and evaluation of historic activities on lands to be acquired for roadway projects to meet the intent of VDOT's WLAs in the Potomac River direct discharge areas.

❖ **Upper Roanoke River**

- As required by VDOT's coverage under the current General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems, VDOT is in the process of updating its MS4 Program Plan to incorporate an updated TMDL Action Plan for the Roanoke River TMDL that incorporates its previously identified efforts to address the TMDL assumptions and requirements. A TMDL annual characterization consistent with VDOT's previous Program Plan is described here until such time as the required updates are completed and implemented.
- An individual wasteload allocation (WLA) of 28.9 tons of sediment/year and 1.23×10^{10} cfu was assigned to VDOT's MS4 Permit # VAR040115.
- Table 4A summarizes the annual stormwater characterization for 2013.
- There are 874 regulated outfalls located within the VDOT ROW in the TMDL watershed.
- VDOT owns and operates 15 stormwater facilities (extended detention basins) within the Bull Run TMDL watershed. 01 of the 15 stormwater facilities were built after the development of the approved TMDL; and therefore, provide pollutant reductions on previously untreated area.
- VDOT operates 12 facilities in the study area: Salem Residency and SW AHQ, Salem District Complex, Mason Creek Bulk Storage Lot, Airport AHQ (TAMS), Hanging Rock AHQ, Route 11 Storage Area, Route 641 Storage Lot, Brambleton-Cave Spring Storage Lot, Cove Road Storage Lot, and 3 lessees. The Salem Residency and SW AHQ consist of office buildings, maintenance shops, several equipment storage buildings, and fueling stations. The Salem District Complex consists of several office buildings, road painting operations, pesticide and herbicide storage and operations, traffic signs, the traffic signal department, vehicle surplus, refueling, service garages, and equipment storage. The Salem District Complex is connected to Salem's sanitary sewer system and not on a septic system. They also do not store or use portable toilets. VDOT staff said that roosting birds were not a problem at the facility. No other sources of bacteria were found at the facility. There were no material stockpiles kept at the District complex. The Mason Creek Bulk Storage Lot consists of two storage areas, divided by a railroad. The Lower Lot contains a garage building and a storage building. Both buildings are locked and not used for storage. The main function of the lower lot is staging debris from ditch cleaning. The Upper Lot is used to store snow removal equipment and other surplus material. The lot is also used to dispose of extra dirt. Dirt is piled on a flat part of on the east side. No known sources of bacteria were observed at either lot. There are no sanitary facilities (portable or permanent) located at the lots, no storage of portable toilets, and no manmade areas of roosting birds. Silt fencing was installed on the northeastern boundary of the Lower Lot (neighboring Mason Creek) to prevent possible migration from leaving the site. The Airport AHQ (TAMS) consists of an office building, a salt storage building, spreader racks that no longer store spreaders, and equipment storage for snow removal. The salt storage building has a mixing pad with a drop inlet that is valve-controlled to discharge into the stormwater system only when no salt is in the stormwater. The area headquarters does not store or use portable toilets. The facility is connected to the local sanitary system. VDOT employees said there were no issues with roosting birds at the facility. No other potential sources of bacteria were observed. The AHQ does not maintain any material or debris piles. The AHQ stores salt, which is kept in a closed building with no exposure to rain. The Hanging Rock AHQ consists of one office building (Bridge Department), a service garage combined with crew offices, several staging buildings, fueling station, and spreader racks. Salt, deicing materials, equipment, and materials are stored onsite. There is an additional area, leased to the Virginia State Police with a building comprised of offices and a garage used for temporary vehicle search and seizure.

	No materials or vehicles are permanently stored by the State Police. No bacteria sources were identified at the site. The area headquarters is served by the local sanitary system, so septic systems are not a concern. Portable toilets are not used or stored at the site. In prior years, roosting birds were an issue in the garage; however, bird wire has been used to prevent the birds from roosting in this area. Crew members believed that animal carcasses were previously stored onsite and a composter was briefly used before being removed due to odor issues. Currently, animal carcasses are taken to the landfill. Several material piles exist on the site without protection from precipitation or barriers to prevent migration. All stormwater from the site appears to drain into a stormwater basin on the south boundary of the site. The Route 11 Storage Area is used for snow removal operations and consists of a salt storage building, deicing chemicals, material stockpiles, and small spreader rack. The Route 11 Storage Lot is connected to the local sanitary sewer system and does not use/store portable toilets. VDOT staff reported that there was no knowledge of birds ever roosting at the site. At the storage lot, there were a few material piles for gravel, dirt, and debris that were located on the higher (eastern) portion of the site. The Route 641 Storage Lot consists of a concrete pad with 3-feet high walls and cubed concrete structures in the northeast portion of the lot. VDOT staff at the Christiansburg Residency said this site is inactive and has been for several years. No materials, equipment, vehicles, etc. are stored at this area. The Brambleton-Cave Spring Storage was used to stage material piles. It is currently inactive, except to store materials such as surplus pipes and plow blades. There are no apparent sources of bacteria (i.e. no sanitary facilities, no areas for roosting birds) present at the site. At the eastern side of the storage area there are stockpiles of fill dirt and gravel. The Cove Road Storage Lot has not been used in several years and contains no buildings or storage (material, equipment, vehicle, etc.). There are no portable toilets, areas for bird populations to roost, septic systems, or other sources of bacteria present at the site. Direct sources of sediment such as material piles were not present at this site. • VDOT staff completed the BMP Selection and Implementation Plans for Sediment and Bacteria. In addition to implementing and annually evaluating the Core BMPS of VDOT's MS4 Program, the BMP Implementation Plan recommends: 1) Monthly street-sweeping of 1,325 acres of roadway to achieve VDOT's Sediment WLA; and 2)Evaluating BMP 3A and 6B of the MS4 Program Plan and modifying if applicable, considering the development of a BMP for proper use, maintenance, storage and disposal of portable toilets and associated sanitary waste, and considering the development of a BMP for reporting suspect leaks, ruptures or other problems associated with sewer lines, and providing training as appropriate, to achieve VDOT's Bacteria WLA.

Best Management Practices for Construction Site Runoff Control Program

4	*Develop, implement and enforce a program to reduce pollutants in storm water runoff from construction activities that result in a land disturbance of greater than or equal to one acre*
A	**Guidance for Construction Site Runoff Control Program**
	Implement qualifying state erosion and sediment control and stormwater management programs approved by the Virginia Department of Water Quality (DEQ) on all regulated land disturbing activities.
B	**Compliance Procedures for Land Disturbance Activities**
	Review and certify erosion and sediment and stormwater management plans for regulated land disturbance activities, secure required coverage under the Virginia Pollutant Discharge Elimination System (VPDES) Construction Permit, and track the activities. Perform final inspections to certify construction of post construction SWM facilities was completed per approved plans and that the facilities are functional.
C	**Erosion and Sediment Control Training**
	Provide training opportunities through the Erosion and Sediment Control Contractor Certification (ESCCC) Program and the In stream Maintenance Training Program. Ensure employees obtain the appropriate certifications required by the Virginia Erosion and Sediment Control (ESC) law.
D	**Inspections and Quality Assurance Reviews**
	Perform inspections in accordance with Virginia ESC Regulations and undertake quality assurance reviews to assess compliance with environmental commitments on all regulated land disturbance activities.
E	**Enforcement Process**
	Review administrative process for enforcement procedures, penalties for violations and procedures for issuing stop-work orders and revise/develop as appropriate.
F	**Procedures for receipt and consideration of information submitted by the public**
	Develop and implement procedures for the receipt and consideration of information submitted by the public concerning VDOT's stormwater program.

BMP 4A	**Evaluate guidance for Construction Site Runoff Control Program – Location and Design Lead Division**
Measurable Goal(s)	*Goal*: Evaluate guidance documents, adjust/revise as appropriate. *Measure*: Number of documents reviewed and adjusted/revised. *Goal*: Secure annual approval of the VDOT ESC and SWM Standards and Specifications from DEQ. *Measure*: Material submitted and approved by DEQ. *Goal*: Continue to implement project tracking of regulated land disturbing activities in urban areas. *Measure*: Total number of land disturbing activities registered for VPDES Construction Permit coverage.
Milestone	Submit Erosion and Sediment Control and Stormwater Management Standards and Specifications to DEQ for annual approval. Acquire and track VPDES Construction Permit coverage for regulated land disturbing activities undertaken by the Department. Review and update program guidance as appropriate.
Accomplishments	DEQ extended previous 2013 approval of the VDOT Annual ESC & SWM Standards. Acquired and tracked VSMP Construction Permit coverage for 93 land disturbing activities. impacting approximately 831 acres. VDOT also terminated 491 VSMP permits during the permit year.

BMP 4B	Compliance Procedures for Land Disturbance Activities – Location and Design Division
Measurable Goal(s)	*Goal*: Ensure that the requirements of VDOT's ESC and SWM Programs are followed for each land regulated disturbing activity through the VPDES ESC and SWM Plan Certification process and the Termination Notification process. *Measure*: Number of projects submitted for coverage under the VPDES Construction Permit and number of termination notices processed.
Milestone	Require certification of ESC and SWM Plans for regulated land disturbance activities. Require certification of construction and functionality of post construction SWM facilities for regulated land disturbance activities.
Accomplishments	All ESC & SWM plans were reviewed and approved by a DEQ certified ESC plan reviewer prior to requesting the VPDES Construction Permit coverage.

BMP 4C(1)	Erosion Prevention and Sediment Control Training – Location and Design Lead Division
Measurable Goal(s)	*Goal*: Provide VDOT's Erosion and Sediment Control Contractor Certification (ESCCC) Program training to contractor personnel. *Measure*: Number of contractor personnel trained.
Milestone	Update/revise course material as necessary, Provide training to appropriate contractor personnel. Track number of personnel trained.
Accomplishments	All course training material has been up-dated / revised to reflect the current VDOT Road and Bridge Standards and Specifications. 569 participants received ESCCC certification.

BMP 4C(2)	Erosion Prevention and Sediment Control Training – Environmental Lead Division
Measurable Goal(s)	*Goal*: Provide VDOT's In Stream Maintenance Training to VDOT maintenance forces. *Measure*: Number of employees trained.
Milestone	Update/revise course material as necessary. Provide training to appropriate VDOT personnel. Track number of personnel trained.
Accomplishments	In-Stream Maintenance Materials "Environmental Compliance for Maintenance Activities" updated as necessary. There were 216 employees trained on these modules this reporting year.

BMP 4C(3)	Erosion Prevention and Sediment Control Training – Learning Center Lead Division
Measurable Goal(s)	*Goal*: Ensure appropriate VDOT employees have necessary DEQ Certifications. *Measure*: Number of employees certified through DEQ as a RLD, ESC Inspector, Plan Reviewer, etc.
Milestone	Track number of employees with DEQ certifications and provide notification to those requiring recertification.
Accomplishments	Number of VDOT certified employees * ESC Inspector 387 ESC Plan Reviewer 18 ** ESC Combined Administrator 47 * Additional certified resources available through consultant contracts. **Does not include those with professional registrations that qualify the individual as a certified Plan Reviewer.

BMP 4D	Inspections and Quality Assurance Reviews – Construction Lead Division
Measurable Goal(s)	*Goal*: Perform site inspections in accordance with VDOT's annually Approved ESC and SWM Standards and Specifications. *Goal*: Perform project environmental compliance reviews. *Measure*: Total number of reviews performed. *Measure*: Our previous measurable goals were to rank as excellence, complaint, deficient, and non-complaint findings. Changes in CEADER now rank as compliant or non compliant
Milestone	Perform site inspections and compliance reviews and track data in CEDAR
Accomplishments	• Performed site inspections and compliance reviews and tracked data in CEDAR. • Monitored the new Environmental Compliance review process at a program level to insure that reviews were being done and entered into CEDAR. Fully implemented the transition of the environmental reviews to the construction management staff. • Worked with the Environmental Division and developed an Environmental Compliance Inspector classification for use on Consultant Engineering and Inspection contracts to perform future inspections. • Performed 1,423 project compliance reviews with the following results: Compliant 99.3% Non-Compliant 0.7% • Projects compliant leveled from 99.4% in 2012 to 99.3% in 2014 with the total number of reviews increasing from 1353 in 2013 to 1432 in 2014.

BMP 4E	Enforcement Process – Construction Lead Division
Measurable Goal(s)	Goal: Review and revise/develop enforcement policies, procedures and penalties. Measure: Number of policies/procedures reviewed/revised/developed.
Milestone	Review administrative process for enforcement procedures, penalties for violations and procedures for issuing stop-work orders and revise/develop as appropriate.
Accomplishments	Reviewed administrative process for enforcement procedures, penalties for violations and procedures for issuing stop-work orders and revised as appropriate. Continuously reviewed the Road and Bridge Specifications, Copied Notes, Special Provisions, and the Construction Resource Guidebook and found that they were effective and with no changes needed. Reviewed all Construction Directives (CDs) and continued to convert them to Instructional and Informational Memorandum (IIM) including the Environmental and Safety Responsibility.

BMP 4F	Procedures for receipt and consideration of information submitted by the public - Public Affairs Lead Division
Measurable Goal(s)	*Goal*: Develop and implement procedures for the receipt and consideration of information submitted by the public concerning VDOT's Stormwater Management Program. *Measure*: Establishment of a means for citizens to provide information to the Department concerning the Stormwater Management Program and creation of a process for addressing the information received. *Measure*: Number of comments received and actions taken.
Milestone	Maintain public comment page on VDOT SW website. Address comments received.
Accomplishments	VDOT currently maintains a MS4 email address on its Stormwater Management website by which the public can submit comments. The language on the website informs the public that VDOT is willing to accept questions, comments, or concerns. VDOT maintains the means for the public to

	submit comments at any time. There were no comments submitted during this reporting year.

Best Management Practices for Post Construction Runoff Program

5	*Develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre*
A	**Guidance for post-construction runoff controls**
	Continue to implement a comprehensive stormwater management program relative to the most recent approved version of the VDOT Erosion and Sediment Control Management standards and specifications.
B	**Develop and implement strategies for post-construction runoff controls**
	Develop and implement strategies, which include a combination of structural and non-structural best management practices and secure registration coverage for regulated land disturbing activities under the VSMP General Permit for Discharges of Stormwater from Construction Activities.
C	**Provide Long-term operation and maintenance of controls**
	Evaluate inspection requirement guidance for post-construction runoff control and related maintenance requirements and track VDOT owned and operated stormwater management facilities.

BMP 5A	**Guidance for post-construction runoff controls - Location and Design Lead Division**
Measurable Goal(s)	*Goal*: Evaluate stormwater program guidance and update as appropriate *Measure*: Perform annual evaluation of guidance. *Measure*: Number of documents reviewed/revised.
Milestone	Review stormwater program guidance (Instructional & Informational Memoranda, Drainage Manual, standards, specifications, etc) and update as appropriate.
Accomplishments	Reviewed stormwater program guidance and updated the following as necessary: • SWPPP documents • Instructional and Informational Memorandums • Drainage Manual • Road and Bridge Standard and Specifications

BMP 5B	**Develop and implement strategies for post-construction runoff controls – Location and Design Lead Division**
Measurable Goal(s)	*Goal:* Develop and promote the use of appropriate design tools and methodologies to meet the technical requirements for post construction runoff control. *Measure:* Number of design tools and procedures promoted/developed. *Goal*: Secure coverage for all regulated land disturbing activities under the VSMP General Permit for Discharges of Stormwater from Construction Activities. *Measure*: Number of projects registered for coverage. *Goal*: Encourage the use of Low Impact Development (LID) SWM practices where determined appropriate. *Measure*: Number of guidance documents revised to incorporate usage guidelines for LID SWM practices.
Milestone	Register all regulated land disturbing activities for VPDES Construction Permit coverage and track activities in a database. Make appropriate SWM design tools and practices information available to District Offices and Central Office Staff Incorporate guidelines for usage of LID SWM practices into guidance documents as appropriate.
Accomplishments	93 regulated land disturbing activities were registered for VPDES Construction Permit coverage and were tracked in the VDOT Construction Permit database.

	SWM design tools and guidelines were made available to all the District Offices and Central Office staff.

BMP 5C	**Provide Long-term operation and maintenance of controls – Maintenance Lead Division**
Measurable Goal(s)	*Goal*: Evaluate inspection and maintenance guidance/procedures and revise/update as appropriate. *Measure*: Evaluation and updating/revising of guidance documents. *Goal*: Update/develop/maintain a database of all known VDOT owned and operated structural stormwater management facilities. *Measure*: Update/creation of a database identifying the type of BMP, HUC, impaired water discharged to (if any) and number of acres treated by the facility. *Measure*: Number of SWM facilities entered into database. (Collected information will be provided in subsequent annual reports). *Goal*: Perform yearly inspection and required maintenance on stormwater management facilities. *Measure*: Number of facilities inspected.
Milestone	Review inspection and maintenance guidance for structural stormwater management facilities and update/revise as appropriate. Inventory – L&D Division will continue to maintain the pre-construction databases related to stormwater structures. Maintenance Division will continue field verification of existing stormwater structures. GIS Database – See BMP 3 C for milestones related to the procurement, modification and implementation of NPDES/MS4 Program software. Perform inspections and required maintenance on stormwater management facilities.
Accomplishments	• The inventories for all stormwater facilities constructed by VDOT or constructed by others and maintained by VDOT are entered into the Maintenance Stormwater Database and also into the Location and Design Storm Water Management Database. • The Maintenance Division conducts inspections on the stormwater facilities in accordance with two classifications: o Stormwater facilities that are included in a Turnkey Asset Maintenance Services (TAMS) contracts are inspected and maintained in accordance with the TAMS contract o Stormwater facilities that are not included in a TAMS contract are inspected in accordance with the inspection forms included in the Maintenance Division's Stormwater Database. The inspection form varies by type of facility to be inspected. All districts are using the current inspection forms. A verification process has been developed to ensure that all non-TAMS VDOT maintained facilities have a valid electronic or paper inspection record for each reporting year. The stormwater facility is given a ranking of; "A" No problems observed, "B Minor problems are observed, "C" Moderate problems are observed, "D" Major problems are observed or an "E" Severe problems are observed, and basin is not functioning as designed with several critical parameters with problem conditions. After inspection, the maintenance recommendations are forwarded to the appropriate personnel for action. When a facility is ranked a "D" or "E", the district is requested to develop a work plan to repair the facility. • A total of 801 inspections of SWM facilities were conducted during the permit year. • VDOT, with the assistance of its MS4 consultant, has developed the final draft of the Stormwater Management Facilities Inspection Manual and the BMP Maintenance Manual. The completion of these manuals was delayed to ensure the incorporation of all BMP's included on the Virginia Stormwater BMP Clearinghouse and the revised Virginia Stormwater Management Handbook • A Cloud based application for mapping of all completed stormwater facilities that are maintained by VDOT has been developed and tablets purchased and distributed that will allow the VDOT districts to directly post new facilities to the map and correct any location

discrepancies in previously mapped facilities. The completed stormwater facilities that are maintained by VDOT have also been posted to the VDOT GIS Integrator. The Integrator map will be updated quarterly based on the Cloud data starting January 2015.

- The inventory of stormwater facilities within Census Urban Areas is shown below:

Census Urban Area	Number of Facilities	Impervious Area Treated (Acres)	Facilities with Impaired Receiving Waters	Impervious Area Treated (Acres)
Blacksburg, VA	21	67.41	0	0.00
Bristol, TN—Bristol, VA	9	42.69	2	6.34
Charlottesville, VA	16	10.47	1	1.04
Danville, VA	13	44.40	0	0.00
Fredericksburg, VA	33	77.50	3	16.00
Harrisonburg, VA	6	12.10	5	3.30
Kingsport, TN--VA	4	5.15	0	0.00
Lynchburg, VA	22	51.38	2	15.77
Richmond, VA	123	587.07	18	56.62
Roanoke, VA	10	16.47	1	4.61
Staunton-Waynesboro, VA	25	138.50	1	12.30
Virginia Beach, VA	66	219.89	4	13.21
Washington, DC - VA - MD	419	2,136.14	50	220.53
Williamsburg, VA	30	129.51	2	4.41
Winchester, VA	19	36.54	1	4.67
Total	816	3,575.22	90	358.80

Best Management Practices for Pollution Prevention and Good Housekeeping

6	*Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations, such as asset management activities, fleet and building maintenance, new construction, and stormwater system maintenance*
A	**Implement program to prevent/reduce pollution runoff**
	Existing procedures for nutrient management application will be reviewed and revised (if applicable) in an effort to minimize the discharge of pollutants. The procedures will also be reviewed to ensure that these activities are performed under, and in accordance with, any appropriate permit conditions.
B	**Implement operation procedures, maintenance schedules, and long-term inspection procedures to reduce pollutant discharges**
	Operation and maintenance programs will continue to be implemented and revised as necessary to ensure that these activities are performed under, and in accordance with, any appropriate permit conditions.
C	**Implement a program to reduce/eliminate discharges of pollutants and promote the proper disposal of waste**
	Existing procedures for waste disposal will be reviewed and revised (if applicable) in an effort to minimize the discharge of pollutants. The procedures will also be reviewed to ensure that these activities are performed under, and in accordance with, any appropriate permit conditions.
D	**Employee pollution prevention education**
	Employee education will be provided to help minimize storm water pollution potential from land disturbance activities, fleet storage areas, building sites, parking areas and maintenance yards.

BMP 6A	**Implement program to prevent/reduce pollution runoff – Maintenance Lead Division**
Measurable Goal(s)	*Goal*: Complete the approval process for a revised nutrient management strategy for land disturbance activities and implement on all maintenance and construction activities. *Measure*: Number of acres of land disturbance on which the revised nutrient management strategy is implemented under the VSMP Construction Permit Program.
Milestone	Incorporate NMP requirements on all maintenance and construction activities and track acreage through VSMP Construction Permit Program.
Accomplishments	• DCR approval was received for the 42 (forty two) NMP's previously developed for the Rest Areas/Welcome Centers covering an area of 151.4 acres developed for all fixed facilities that will apply fertilizers and 6 (six) NMP's were developed for Residencies/District offices covering an area of 10.505 acres. • The Roadside NMP and Construction NMP have been developed and DCR approval received. The revised Roadside and Construction NMP incorporated the changes from the Urban Nutrient Management Handbook published by DCR. A Roadside Development Sheet committee is being formed to administer the development of all policies, specifications, standards and approved products lists necessary to implement the Construction and Roadside NMP.

BMP 6B	**Implement operation procedures, maintenance schedules, and long-term inspection procedures to reduce pollutant discharges – Maintenance Lead Division**
Measurable Goal(s)	Goal: Review and revise as necessary the compliance procedures for maintenance activities. Measure: Completion of review and update of procedures (if applicable). Goal: Perform maintenance activities such as animal carcass removal and disposal, street cleaning, etc. to minimize/eliminate potential sources of stormwater pollution. Measure: Measure and report maintenance activities that contribute to good housekeeping. Goal: Continue to implement procedures and training that will encourage employees and contractors to employ pollution and prevention practices in day-to-day operations. Measure: Number of guidance documents revised and number personnel trained.
Milestone	Conduct annual review of Maintenance Best Management Procedures, environmental guidance and equipment/facilities operation procedures to incorporate pollution prevention through good housekeeping. Revise, as necessary, the listing of Maintenance Activity Codes and FMIS cost centers to determine appropriate good housekeeping maintenance activities and produce annual report. Require employees and contractors to employ pollution prevention practices in day-to-day operations and develop a plan to implement any revised guidance and procedures.
Accomplishments	• A rewrite of the Maintenance Best Practices Manual was completed in March 2014. Each section of the Manual was revised to take into account environmental factors and appropriate citations for additional environmental information such as the Virginia Department of Environmental Quality, Erosion and Sediment Control Handbook and Virginia Department of Environmental Quality, Stormwater Management Program Manual. The requirements in Best Practices ensure that appropriate maintenance and environmental procedures and considerations are taken into account. • The units of work associated with maintenance activities that contribute to good housekeeping on the secondary and primary highways were previously reported through the Work Accomplishment System (WAS). Changes were made in FY12 to the categories for reporting work accomplishments, which has resulted in elimination of most reporting quantities. Although the good housekeeping activities have not been reduced, a quantifiable value is no longer available. • The Adopt-A-Highway program reported that 24596.15 miles of highway were adopted and the volunteers reported that 4772.2 cubic yards of material was cleaned from the roadsides. The volunteers collect the trash and then report the date and quantities to the Adopt-A-Highway coordinator. A VDOT crew collects the orange trash bags and other debris collected by the volunteers and disposes of the material in accordance with appropriate disposal practices. • In April 2014 an Adopt-A-Highway IDDE Field Guide was developed and implemented. This field guide is available for review and use by the team leaders of the volunteer groups for each adopted highway segment.

BMP 6C	**Implement a program to reduce/eliminate discharges of pollutants and promote the proper disposal of waste – Maintenance Lead Division**
Measurable Goal(s)	Goal: Annually evaluate the Department's waste management program and revise waste disposal processes and procedures as necessary. Measure: Annual review of waste management program and number of waste disposal processes or procedures revised. Goal: Ensure proper disposal of wastes from construction and maintenance activities in accordance with the DCR approved VDOT Erosion and Sediment Control and Stormwater Management Standards and Specifications and memorandum of agreement with DEQ through environmental compliance reviews. Measure: Total number of reviews performed. Measure: Percentage of environmental reviews resulting in excellence, compliant, deficient, and non-complaint findings. Goal: Develop/revise protocols and tracking procedure for performing environmental compliance assessments of Maintenance Facilities. Perform annual reviews. Measure: Development of protocols and tracking system. Measure: Total number of reviews performed. Measure: Percentage of environmental reviews resulting in excellence, compliant, deficient, and non-compliant findings.
Milestone	Evaluate all current waste disposal policies, procedures and processes and revise as necessary. Perform environmental compliance reviews of waste disposal sites for construction and maintenance activities to ensure that disposal is in accordance with the DEQ approved VDOT Erosion and Sediment Control and Stormwater Management Standards and Specifications and memorandum of agreement with DEQ. Perform environmental compliance assessments of Maintenance Facilities.
Accomplishments	• As the strategies are developed to meet TMDL requirements, VDOT will review the strategy to determine if the procedure or practice will be implemented statewide or just for the specific TMDL area. • No changes were implemented for disposal policies, procedures and processes. The Memorandum of Agreement (MOA) between the Virginia Department of Environmental Quality and Virginia Department of Transportation on Solid Waste that was reported last year has been fully implemented. The MOA, and a VDOT-VDEQ Waste MOA Implementation Guide was communicated to the Maintenance staff and a link placed as on the Transportation Maintenance and Operations Committee (TMOC) Team Site. The MOA covers non-inert debris; animal carcasses, vegetative waste, and inert debris. • The Environmental Division conducts Environmental Compliance Audits on a routine schedule to monitor the handling and disposal of waste. A total of 65 Environmental Compliance Audits were completed in this permit year.

BMP 6D	**Employee pollution prevention education - Environmental Lead Division**
Measurable Goal(s)	*Goal*: Develop/revise/implement training courses for employees that promote a general awareness of stormwater management and pollution prevention. *Measure*: Number of courses developed/revised and number of employees trained. *Goal*: Provide Waste Management, Advance Hazardous Waste Management, In-Stream Maintenance Activities, USDOT Hazardous Shipping, Spill Prevention Control and Countermeasure (SPCC), and VDACS Pesticide Applicator Certification training. *Measure*: Number of employees trained. *Goal*: Develop/revise/implement training courses for Cleaning Asphalt Equipment and Salt Pond Management. *Measure*: Number of courses developed/revised and number of employees and contractors trained.
Milestone	Provide training for employees that promotes a general awareness of stormwater management and pollution prevention. Provide Cleaning Asphalt Equipment and Salt Pond Management training to appropriate employees. Provide Waste Management, Advance Hazardous Waste Management, In-Stream Maintenance Activities, USDOT Hazardous Shipping, SPCC, and VDACS Pesticide Applicator Certification training on an as needed basis.
Accomplishments	The MS 4 Facility Compliance class was developed to provide training that addresses stormwater management and pollution prevention; it includes sections on asphalt equipment cleaning and salt pond management. In addition to pollution prevention/good housekeeping for facility operations, IDDE is also covered. No revisions were made to the Asphalt Equipment Cleaning or Salt Pond Management courses during this permit year. Training was provided to employees this permit year as follows: • Waste Management – 54 employees trained. • MS4 Facility Compliance – 240 employees trained. • Advance Hazardous Waste Management – 0 employees trained. • In-Stream Maintenance Activities – See Accomplishments listed in 4C(2). • USDOT Hazardous Materials Transportation – Required every three years, elements covered in Waste Management training • Spill Prevention Control and Countermeasures (SPCC) Refresher – 13 employees trained. • Asphalt Equipment Cleaning – Covered in Waste Management training • Salt Pond Management - Covered in Waste Management training

ATTACHMENTS

Attachment 1

TMDLs approved prior to 7/1/13 with a WLA assigned to VDOT's MS4

- Stroubles Creek- Sediment (6/17/04)
- Goose Creek- Sediment (8/31/04)
- Crab Creek- Sediment and Bacteria (12/2/04)
- Abrams and Opequon Creeks- Sediment (6/28/05) and Bacteria (12/20/05)
- Roanoke River- Sediment (9/7/06) and Bacteria (6/27/07)
- Bull Run- Sediment (6/27/07)
- Popes Head Run- Sediment (6/27/07)
- Potomac River- PCBs (4/11/08)
- James River in Lynchburg- Bacteria (7/31/08)
- Occoquan River- Bacteria (7/31/08)
- Difficult Run- Sediment (4/27/09) and Bacteria (4/28/09)
- Rivanna River- Sediment (4/27/09) and Bacteria (4/28/09)
- Accotink Creek- Bacteria (4/28/09)
- Rappahannock River- Bacteria (4/28/09)
- Neabsco Creek- Bacteria (4/28/09)
- Four Mile Creek Tidal- Bacteria (9/30/2010)
- Hunting Creek, Holmes Run, Cameron Run- Bacteria (8/4/11)
- Hoffler Creek- Bacteria (6/29/12)
- James River in Richmond- Bacteria (6/29/12)
- Chickahominy River- Bacteria (3/25/13)

Attachment 2

VDOT's WLAs for TMDLs listed in Attachment 1

TMDL	Permit Cycle	WLA (tons/yr or MPN/yr)
Stroubles Creek- Sediment	6/17/2004	210.88
Goose Creek- Sediment	8/31/2004	1587.2
Roanoke River- Sediment	9/7/2004	31
Crab Creek- Bacteria	12/2/2004	3.40E+08
Roanoke River- Bacteria	12/2/2004	1.23E+10
Crab Creek- Sediment	12/2/2004	27.57
Abrams Creek- Sediment	6/28/2005	442.7
Lower Opequon Creek- Sediment	6/28/2005	269.2
Abrams Creek- Bacteria	12/20/2005	1.94E+13
Popes Head Creek- Sediment	6/27/2007	1,584.70
Bull Run- Sediment	6/27/2007	5823.4
Potomac River- PCBs	4/11/2008	Best Management Practices (BMPs), rather than as numeric effluent limits
James River, Lynchburg- Bacteria	7/31/2008	4.72E+12
Occoquan River- Bacteria	7/31/2008	1.94E+13
Difficult Run- Sediment	4/27/2009	3595
Rivanna River- Sediment	4/27/2009	3.27E+12
Difficult Run- Bacteria	4/28/2009	9.86E+12
Rivanna River- Bacteria	4/28/2009	3.27E+12
Lower Accotink Creek- Bacteria	4/28/2009	1.73E+12
Rappahannock River- Bacteria	4/28/2009	3.89E+11
Neabsco Creek- Bacteria	4/28/2009	1.05E+12
Four Mile Run- Bacteria	9/30/2010	3.76E+13
Hunting Creek, Holmes Run, Cameron Run- Bacteria	8/4/2011	3.62E+14
Hoffler Creek- Bacteria	6/29/2012	5.36E+11
James River, Richmond- Bacteria	6/29/2012	1.66E+14
Chickahominy River- Bacteria	3/25/2013	2.68E+11

Attachment 3

TMDLs approved by the SWCB between 07/01/13 and 06/30/14 with a WLA assigned to VDOT's MS4

- Chickahominy River- Sediment (3/28/14)
- Potomac River Tributaries in Prince William Stafford Counties- Bacteria (4/4/14)
- Sugarland Run, Mine Run, and Pimmit Run in Arlington, Fairfax, and Loudoun- Bacteria (4/4/14)
- Poquoson River & Back Creek in York County- Bacteria (6/30/14)[2]
- Back River in York County and Cities of Hampton, Poquoson, and Newport News- Bacteria (6/30/14)[2]

Attachment 4

VDOT Stormwater Management Facilities Located in MS4 Census Urban Areas

Stormwater Management Facilities Inventory

Total Facilities (Construction Complete)

Jurisdiction: **Albemarle County** Total Stormwater Facilities **20**

General Facilities Type: **Basin** Count: **11**

Specific Facilities Type: Count: **2**

SWMID	Location	Maintained By	Maintenance Partner	Latitude	Longitude
02017	Rt 631WB on right before the bridge	VDOT			
02018	Rt 631 EB on right before the bridge / down roadway embankment	VDOT			

Specific Facilities Type: **Dry Basin** Count: **8**

SWMID	Location	Maintained By	Maintenance Partner	Latitude	Longitude
02001	C.ville Residency Bldg.	VDOT		38.0169	-78.4108
02002	5th st. on right headed downhill toward Mosby Meadow entrance / As 4 lane turns back to 2 on right	VDOT		37.9989	-78.5288
02003	Behind "Floor & More" on 29 S just N of Airport Rd / Access from Airport Auto Service Center	VDOT		38.1335	-78.4354
02006	5th St. headed toward C'ville. Bhind g-rail just prior to rt 877 - South of Stream	VDOT		38.0035	-78.5224
02007	th St. headed toward C'ville. Bhind g-rail just prior to rt 877 - North of Stream	VDOT		38.0036	-78.5222
02008	5th st. to right on 780. Immed. on right	VDOT		38.0063	-78.5206

02009	5th st. to right on 780. On right 1/4 mile		VDOT		38.0082	-78.5208
02013	Rt 29 SBL between Colonial Auto and Rio Self Storage		VDOT		38.0843	-78.4729

Specific Facilities Type: **Extended Detention Dry Basin** Count: **1**

SWMID	Location	Maintained By	Maintenance Partner	Latitude	Longitude
02021	On right traveling WB just prior to Rt 1380	VDOT			

General Facilities Type: **Filtration** Count: **4**

Specific Facilities Type: **Bioretention** Count: **4**

SWMID	Location	Maintained By	Maintenance Partner	Latitude	Longitude

Jurisdiction: **Albemarle County** Total Stormwater Facilities **20**

General Facilities Type: **Filtration** Count: **4**

02014	Rt 631WB across the road from Cville HS football field	VDOT			
02015	Rt 631WB across the road from Cville HS football field	VDOT			
02016	Rt 631WB on the right before the bridge	VDOT			
02022	On left traveling WB just past Rt 1815	VDOT			

General Facilities Type: **Manufactured** Count: **2**

Specific Facilities Type: **Pipe Detention** Count: **2**

SWMID	Location	Maintained By	Maintenance Partner	Latitude	Longitude
02004	Roslyn Ridge Rd -left shoulder in sag / About 100' from Hydraulic Rd	VDOT		38.0814	-78.4934
02005	Manhole sidewalk across from phone co. Earlysville Rd at pole G0027	VDOT		38.0854	-78.4855

General Facilities Type: **Miscellaneous** Count: **3**

Specific Facilities Type: **Grassed Swale** Count: **1**

SWMID	Location	Maintained By	Maintenance Partner	Latitude	Longitude
02023	Rt 691 (Jarman's Gap Rd) on right from Rt 240 between Rt 1201 and 1209	VDOT		-78.7058	38.0684

Specific Facilities Type: **Level Spreader** Count: **1**

SWMID	Location	Maintained By	Maintenance Partner	Latitude	Longitude
02019	Rt 631WB on right at WB abutment of RR Bridge at Gas Staion	VDOT			

Specific Facilities Type: **Other** Count: **1**

SWMID	Location	Maintained By	Maintenance Partner	Latitude	Longitude
02020	Rt 631EB on right behind Cville HS football field	VDOT			

Jurisdiction: **Culpeper County** Total Stormwater Facilities **22**

General Facilities Type: **Basin** Count: **21**

Specific Facilities Type: **Dry Basin** Count: **21**

SWMID	Location	Maintained By	Maintenance Partner	Latitude	Longitude
23001	Rt 799 (McDevitt Dr.) 1/8 mi. past college entrance on right	VDOT		38.4590	-77.9829
23002	Rt 799 (McDevitt Dr.) 3/8 mi. past college on right	VDOT		38.4610	-77.9820
23004	Rt. 3 west where 4-lane changes to 2 lane on right heading west	VDOT		38.4213	-77.8358
23005	Rt. 3 EB on right at Lignum / Intersection with Rt 3EB and Rt 788	VDOT		38.4185	-77.8293
23006	Rt. 3 WB - Approx. 100yds west of Lignum and Rt 647	VDOT		38.4182	-77.8275
23007	Rt. 3 WB 1/4 mile east of east intersection of Rt 788 on right	VDOT		38.4138	77.8213

23008	Rt. 3 WB 1/2 mile east of east intersection of Rt 788 on right	VDOT		38.4111	-77.8189
23009	Rt 3.WB 1.25 mi west of river	VDOT		38.4030	-77.8128
23010	Rt. 3 WB 1/2-1 mi. west of river. Next to brown house	VDOT		38.4004	-77.8100
23011	Rt. 3 EB - .75 miles east of Rt 788 East Intersection on right- bottom of hill past red roof house	VDOT		38.3961	-77.8051
23012	Rt. 3 EB - .85 miles east of Rt 788 East Intersection on right- bottom of hill past red roof house	VDOT		38.3958	-77.8044
23013	Rt. 3 EB directly across fom Shell station and Rt 620	VDOT		38.3871	-77.7955
23014	Rt.3EB 1/4 mi. past Shell station on right at Rt 757 sign	VDOT		38.3833	-77.7932
23015	Rt.3 EB 1/4 mi past Rt 757 / 1/4 mile before River	VDOT		38.3809	-77.7896
23016	Rt 3 EB at Gregory Smith Farm	VDOT		38.4507	-77.9406
23017	Rt 3 WB Across from Stone Quarry	VDOT		38.4449	-77.9201
23018	Rt. 299 at new Epiphany School and just prior to Rt 692	VDOT		38.4428	-78.0232
23019	Rt 29 NB just before 1st Culpeper exit	VDOT		38.4545	-78.0292
23020	Rt 798 - just east of the intersection of Rt 799 on the right	VDOT		38.4621	-77.9782
23022	Rt 229 WB Just North of Jehovah Witness Center and south of High School Drive - Off R/W and behind house	VDOT		38.4959	-77.9905
23023	Rt 694 1/8 mile from Rt 229 on left/ Just before School Entrance	VDOT		38.4983	-77.9895

Jurisdiction: **Culpeper County** Total Stormwater Facilities **22**

General Facilities Type: **Miscellaneous** Count: **1**

Specific Facilities Type: **Grassed Swale** Count: **1**

SWMID	Location	Maintained By	Maintenance Partner	Latitude	Longitude
23003	Inter. Rt 3 and 522 on immediate right once turning onto Rt 522 from Rt 3	VDOT		38.4457	-77.9786

Jurisdiction: **Fauquier County** Total Stormwater **22**

Facilities

General Facilities Type: **Basin** Count: **21**

Specific Facilities Type: **Dry Basin** Count: **16**

SWMID	Location	Maintained By	Maintenance Partner	Latitude	Longitude
30002	Rt 28 Near Midland b4 commuter lot on left	VDOT		38.5995	-77.7287
30004	Rt 676 approx 1/2 mile from Rt 29 on right	VDOT		38.7648	-77.6967
30005	Rt 15/29 SB in Commuter Parking Lot just south of Rt 605	VDOT		38.7370	-77.7679
30006	Rt 29 NB Just North of Rt 605 on right	VDOT		38.7385	-77.7647
30007	Rt 15/17/29 just beyond Metz Rd. & before I-66 exit on right	VDOT		38.7161	-77.7806
30008	Rt 15/17/29 just beyond Metz Rd. & before I-66 exit on right / 100yds North of Basin 30007	VDOT		38.7171	-77.7804
30009	Rt 17Spur North just before overpass of Business 29 North on right	VDOT		38.7264	-77.7818
30010	Rt 17N Exit Ramp from Rt 29 South on left in ramp road point	VDOT		38.7286	-77.7794
30011	17 N exit ramp from 29 S; on right just before merge onto Rt 17N Spur	VDOT		38.7300	-77.7823
30012	1460 Blackwell Rd - Inside WSA Plant and fences	VDOT		38.7391	-77.7924
30013	Rt 17N Spur on right prior to merge with Rt 17N	VDOT		38.7385	-77.8049
30014	Rt 17N Spur on right prior to merge with Rt 17N / 100 yards N of Basin 30013	VDOT		38.7386	-77.8052
30015	Rt 17N Spur - in median just prior to merge with Rt 17 N	VDOT		38.7381	-77.8052
30016	Rt 17N and Rt 17N Spur Merge on right	VDOT		38.7399	-77.8072
30017	Rt 17N and Rt 17N Spur Merge on right / 100yds a past Basin 30016	VDOT		38.7409	-77.8079
30018	Rt 17 South at exit ramp to Rt 17S Spur to Fredericksburg on right	VDOT		38.7411	-77.8094

Specific Facilities Type: **Extended Detention Dry Basin** Count: **4**

SWMID	Location	Maintained By	Maintenance Partner	Latitude	Longitude

30019	Rt 17S Spur on right behind Highland Athletic Fields / Biofilter with Forebay	VDOT	38.7372	-77.8014
30021	Rt 655 just east of Tin Pot Run Bridge	VDOT	38.5306	-77.8029
30022	Rt 29 NB at Intersection with Rt 844 near Opal	VDOT	38.6078	-77.8000
30023	Rt 29SB inside the loop to Rt 17EB	VDOT	38.6135	77.8026

Jurisdiction: **Fauquier County**

Total Stormwater Facilities: **22**

General Facilities Type: **Basin** Count: **21**

Specific Facilities Type: **Wet Basin** Count: **1**

SWMID	Location	Maintained By	Maintenance Partner	Latitude	Longitude
30003	Rt 28 on left at intersection with Rt 649	VDOT		38.6042	-77.7209

General Facilities Type: **Manufactured** Count: **1**

Specific Facilities Type: **Proprietary** Count: **1**

SWMID	Location	Maintained By	Maintenance Partner	Latitude	Longitude
30020	Rt 17N Spur on right just prior to merge with Rt 17N at inlet to structure 30015 -manufactured concrete DI	VDOT		38.7381	-77.8057

Jurisdiction: **Louisa County**

Total Stormwater Facilities: **1**

General Facilities Type: **Basin** Count: **1**

Specific Facilities Type: **Dry Basin** Count: **1**

SWMID	Location	Maintained By	Maintenance Partner	Latitude	Longitude
54001	Rt. 208 near Louisa. 1/4 mil from 22/33	VDOT		38.0192	-78.0043

Jurisdiction: **Rappahannock County**

Total Stormwater Facilities **1**

General Facilities Type: **Basin** Count: **1**

Specific Facilities Type: **Dry Basin** Count: **1**

SWMID	Location	Maintained By	Maintenance Partner	Latitude	Longitude
78001	Rapp. Area Headquarters	VDOT		38.6837	-78.1854

District Total **66**

Attachment 5
VDOT MS4 Outfalls by Virginia HUC 6

Blacksburg, VA

VAHUC6	Name	Outfalls
NE56	Little River-Meadow Creek	0
NE57	New River-Connellys Run	0
NE58	Crab Creek	8
NE59	New River-Stroubles Creek	17
NE60	Toms Creek-Poverty Creek	6
RU04	Elliott Creek	0
RU05	South Fork Roanoke River-Brake Branch	0
RU06	North Fork Roanoke River-Dry Run	11
RU07	North Fork Roanoke River-Wilson Creek	3
Total for Blacksburg, VA		45

Bristol, TN--VA

VAHUC6	Name	Outfalls
TH14	Middle Fork Holston River-Cedar Creek	0
TH15	Fifteenmile Creek	0
TH16	Wolf Creek-Spoon Gap Creek	0
TH18	Spring Creek	0
TH20	South Fork Holston River-Beidleman Creek	23
TH21	Beaver Creek-Little Creek	87
TH22	Beaver Creek-Steele Creek	29
TH38	Abrams Creek	0
Total for Bristol, TN--VA		139

Charlottesville, VA

VAHUC6	Name	Outfalls
JR07	Ivy Creek-Little Ivy Creek	19
JR08	South Fork Rivanna River	138
JR11	North Fork Rivanna River-Jacobs Run	36
JR14	Rivanna River-Meadow Creek	80
JR15	Moores Creek	100
JR17	Rivanna River-Carroll Creek	35
Total for Charlottesville, VA		408

Danville, VA

VAHUC6	Name	Outfalls
RD33	Dan River-Danville	6
RD36	Lower Sandy River	3
RD37	Dan River-Sandy Creek (West)	25
RD38	Fall Creek	17
RD39	Dan River-Pumpkin Creek	34
Total for Danville, VA		85

Fredericksburg, VA

VAHUC6	Name	Outfalls
PL60	Potomac Creek-Beaverdam Creek	17
RA45	Rappahannock River-Motts Run	49
RA46	Rappahannock River-Hazel Run	409
RA47	Massaponax Creek	300
RA48	Rappahannock River-Muddy Creek	0
YO38	Ni River	82
YO41	Po River-Lake Pochahontas	9
Total for Fredericksburg, VA		866

Harrisonburg, VA

VAHUC6	Name	Outfalls
PS20	Dry River-Honey Run	1
PS22	Blacks Run	44
PS23	Cooks Creek	37
PS25	North River-Pleasant Run	9
PS26	North River-Mill Creek	11
PS33	Cub Run-Keezletown	13
PS56	Linville Creek	1
PS59	Dry Fork	13
Total for Harrisonburg, VA		129

Kingsport, TN--VA

VAHUC6	Name	Outfalls
TH23	Reedy Creek	2
TH43	Big Moccasin Creek-Little Moccasin Creek	24
TH44	Possum Creek	6
TH45	North Fork Holston River-Newland Hollow	67
Total for Kingsport, TN--VA		99

Lynchburg, VA

VAHUC6	Name	Outfalls
JM07	James River-Judith Creek	0
JM08	Harris Creek	23
JM09	Ivy Creek-Cheese Creek	34
JM10	Blackwater Creek	54
JM11	James River-Opossum Creek	74
JM14	James River-Stonewall Creek	41
JM30	Rutledge Creek	7
RU51	Elk Creek-Chesnut Branch	11
RU55	Big Otter River-Orrix Creek	0
RU56	Buffalo Creek	68
RU58	Flat Creek	20
Total for Lynchburg, VA		332

Richmond, VA

VAHUC6	Name	Outfalls
CU26	Hatcher Run	19
CU52	Second Swamp	4
CU53	Blackwater Swamp	2
JA35	Winterpock Creek	15
JA39	Appomattox River/Lake Chesdin-Cattle Creek	4
JA40	Appomattox River-Oldtown Creek	159
JA41	Swift Creek-Swift Creek Reservoir	220
JA42	Swift Creek-Third Branch	282
JA43	Licking Creek-Second Branch	106
JA44	Swift Creek-Franks Branch	113
JA45	Appomattox River-Ashton Creek	192
JL01	James River-Almond Creek	54
JL02	Falling Creek	465
JL03	James River-Proctors Creek	327
JL04	Fourmile Creek	18
JL06	James River-Curles Creek	2
JL07	James River-Bailey Creek	33
JL16	Chickahominy River-Grassy Swamp Creek	36
JL17	Chickahominy River-Stony Run	60
JL18	Upham Brook	112
JL19	Chickahominy River-Powhite Creek	119
JL20	Chickahominy River-Higgins Swamp	13
JL21	White Oak Swamp	18
JM83	James River-Bernards Creek	175
JM84	Tuckahoe Creek	187
JM85	James River-East Branch Tuckahoe Creek	81

JM86	James River-Little Westham Creek	271
YO11	South Anna River-Cedar Creek	0
YO27	Pamunkey River-Mechumps Creek	0
YO28	Crump Creek	0
YO30	Totopotomoy Creek	0
Total for Richmond, VA		3087

Roanoke, VA

HUC6	Name	Outfalls
JU53	Catawba Creek-Town Branch	0
RU05	South Fork Roanoke River-Brake Branch	0
RU09	Roanoke River-Sawmill Hallow	72
RU10	Mason Creek	11
RU11	Tinker Creek-Buffalo Creek	116
RU12	Carvin Creek	85
RU13	Tinker Creek-Glade Creek	209
RU14	Roanoke River-Peters Creek	285
RU15	Back Creek	61
RU16	Roanoke River/Smith Mountain Lake-Lynville Creek	14
RU39	Goose Creek-North Fork Goose Creek	5
Total for Roanoke, VA		858

Staunton--Waynesboro, VA

HUC6	Name	Outfalls
PS04	Middle River-Bell Creek	0
PS06	Lewis Creek	0
PS07	Middle River-Falling Spring Run	0
PS08	Christians Creek-Folly Mills Creek	0
PS09	Christians Creek-Barterbrook Branch	0
PS10	Meadow Run	0
PS28	South River-Canada Run	0
PS30	South River-Porterfield Run	0
Total for Staunton--Waynesboro, VA		0

Virginia Beach, VA

HUC6	Name	Outfalls
CB19	Severn River	0
CB21	Lower Chesapeake Bay-Poquoson River	0
CB22	Northwest Branch Back River	0
CB23	Southwest Branch Back River	0
CB25	Lynnhaven River	31

CB26	Lower Chesapeake Bay-Little Creek	17
JL35	James River-Skiffes Creek	0
JL38	Warwick River	0
JL42	Chuckatuck Creek	39
JL43	James River-Cooper Creek	39
JL45	Cohoon Creek	0
JL49	Nansemond River-Bennett Creek	57
JL50	Hampton Roads-Streeter Creek	29
JL51	Southern Branch Elizabeth River-New Mill Creek	17
JL53	Southern Branch Elizabeth River-Deep Creek	137
JL54	Eastern Branch Elizabeth River	66
JL55	Western Branch Elizabeth River	202
JL56	Elizabeth River	49
JL57	Willoughby Bay	34
JL58	Hampton Roads-Hampton River	23
YO68	York River-Carter Creek	0
YO69	York River-Sarah Creek	0
Total for Virginia Beach, VA		740

Washington, DC--VA--MD		
HUC6	**Name**	**Outfalls**
PL02	South Fork Catoctin Creek	0
PL05	Potomac River-Limestone Branch	14
PL13	Little River	0
PL14	Goose Creek-Big Branch	7
PL16	Goose Creek-Cattail Branch	75
PL17	Broad Run-Lenah Run	5
PL18	Horsepen Run	81
PL19	Broad Run-Beaverdam Run	191
PL20	Potomac River-Selden Island	55
PL21	Sugarland Run	213
PL22	Difficult Run	232
PL23	Potomac River-Nichols Run-Scott Run	100
PL24	Potomac River-Pimmit Run	58
PL25	Potomac River-Fourmile Run	93
PL26	Cameron Run	264
PL27	Dogue Creek	93
PL28	Potomac River-Little Hunting Creek	71
PL29	Pohick Creek	256
PL30	Accotink Creek	427
PL32	Broad Run-Catletts Branch	3
PL33	Kettle Run	0
PL34	Broad Run-Rocky Branch	111
PL35	Cedar Run-Mill Run	0
PL36	Cedar Run-Owl Run	0

PL40	Cedar Run-Slate Run	0
PL41	Occoquan River-Occoquan Reservoir-Lake Jackson	99
PL42	Upper Bull Run	0
PL43	Little Bull Run	0
PL44	Middle Bull Run	69
PL45	Cub Run	435
PL46	Lower Bull Run	246
PL47	Occoquan River/Occoquan Reservoir	172
PL48	Occoquan River-Belmont Bay	115
PL49	Neabsco Creek	300
PL50	Potomac River-Occoquan Bay	78
PL51	Powells Creek	86
PL52	Quantico Creek	78
PL53	Chopawamsic Creek	16
PL54	Potomac River-Tank Creek	19
PL56	Upper Aquia Creek	78
PL57	Lower Aquia Creek	68
PL58	Accokeek Creek	0
PL59	Potomac Creek-Long Branch	0
RA07	Rappahannock River-Great Run	0
Total for Washington, DC--VA--MD		4208

Williamsburg, VA

HUC6	Name	Outfalls
JL27	Diascund Creek-Mill Creek	0
JL28	Chickahominy River-Yarmouth Creek	0
JL29	Chickahominy River-Morris Creek	0
JL30	James River-Broad Swamp	0
JL31	Powhatan Creek	0
JL33	James River-Lower Chippokes Creek	0
JL34	College Creek	0
JL35	James River-Skiffes Creek	0
YO62	Ware Creek	0
YO65	York River-Skimino Creek	0
YO67	Queen Creek	0
YO68	York River-Carter Creek	0
Total for Williamsburg, VA		0

Winchester, VA

HUC6	Name	Outfalls
PS79	Crooked Run	66
PU12	Hogue Creek	13
PU14	Babbs Run	0
PU16	Opequon Creek-Sulphur Spring Run	200
PU17	Abrams Creek	106
PU18	Opequon Creek-Redbud Run	24

Total for Winchester, VA	409